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ABSTRACT

Data obtained from the 1982 Current Population Survey conducted by the United States Bureau of the Census permit a series of comparisons between households with children enrolled in public schools and those with children enrolled in private schools. The estimates included in this report are based on data from a sample of approximately 60,000 occupied households in 629 areas of the country. These areas include 1,148 counties, independent cities, and minor civil divisions. Charts and tables specify (1) the number and percent of households with children 3 to 20 years old enrolled in grades 1 through 12 by selected demographic characteristics; and (2) percent of households having children enrolled in grades 1 through 12 by type of school and, serially, by children enrolled per household, family income, type of worker, educational attainment level, race/ethnicity, and marital status. The report also provides definitions of terms, a list of states in the four geographical regions of the United States, a discussion of the source and reliability of estimates, and tables noting standard errors of measurement. (RH)

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Contact: Jeffrey W. Williams
(202) 254-5660

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Characteristics of Households with Children Enrolled in Elementary and Secondary Schools

Data obtained from the 1982 Current Population Survey conducted by the Bureau of the Census permit a series of comparisons between households with children enrolled in public schools and those with children enrolled in private schools. This report describes similarities and differences that were observed on selected characteristics.

The table below shows that slightly less than 30 percent of the Nation's 85 million households had children from 3 to 20 years old enrolled in elementary and secondary schools in October 1982. It was estimated that 26 percent of the households had one or more children enrolled in public schools, 3 percent in private schools, and 1 percent in both public and private schools. Of the households with children enrolled, 89 percent were in public schools only, 9 percent in private schools only, and 2 percent in both.

The data also indicate that households with children enrolled in private schools:

- tend to have fewer children per household enrolled.
- have a median family income of $26,500 vs. $19,800 for those with children in public schools.
- have a higher percentage of householders in white collar occupations than those with children in public schools.
- have householders with a higher level of educational attainment than those with children in public schools.
- have a lower percentage of householders classified in minority groups than those with children in public schools.
- represent a higher percentage of households with both spouses present than those with children in public schools.

The following series of charts and tables show similarities and differences between households with children enrolled in public schools only and in private schools only. For convenience, households sending children to public schools are called public school households and those sending children to private schools are called private school households. (The number of households sending children to both public and private schools is too small in many cases to show on the charts.)

Type of household	Number (in thousands)	Percent	
		All households	With children enrolled
Total households	84,883	100	
With no children enrolled	59,776	70	
With children enrolled	25,108	30	100
In public school only	22,223	26	88
In private school only	2,284	3	9
In both	600	1	2

*Details may not add to totals due to rounding

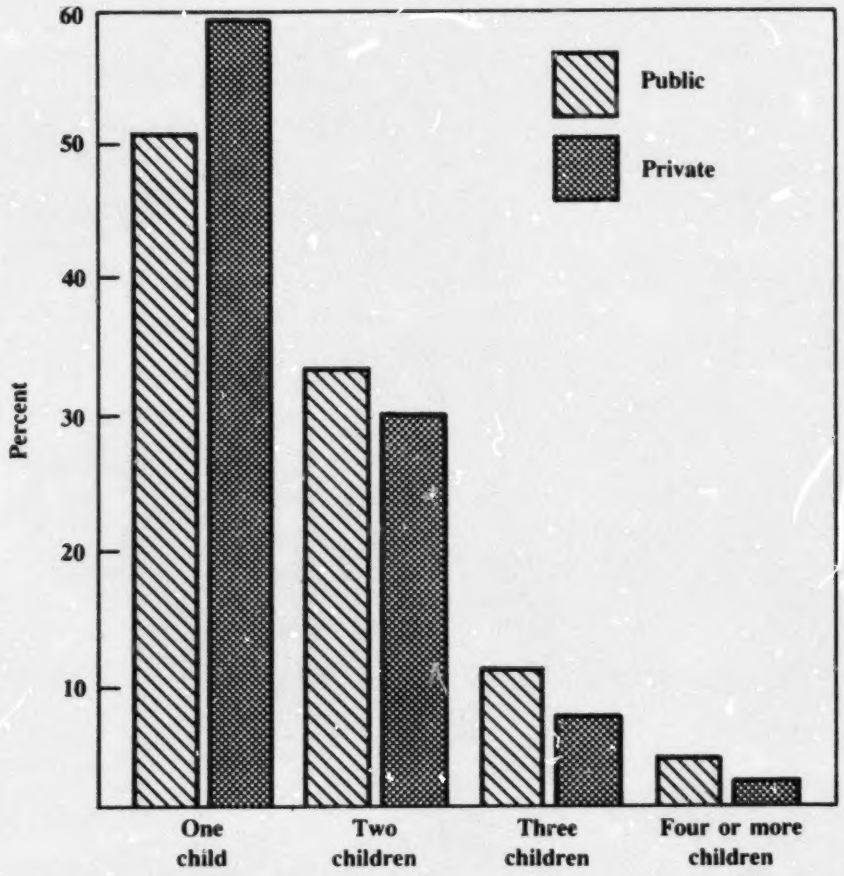
Note: The estimates included in this report are based on a sample survey conducted in October 1982 by the Bureau of the Census in its Current Population Survey Series.

NCES 84-105b

Households with children 3 to 20 years old enrolled in grades 1 through 12: United States, October 1982
(Numbers of households in thousands)

Characteristic	Total households		Public school households		Private school households		Public/Private households	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total households	25,108	100.0	22,223	100.0	2,284	100.0	600	100.0
A. By number of children enrolled								
One child	12,661	50.4	11,300	50.8	1,361	59.6	0	0.0
Two children	8,418	33.4	7,394	33.3	689	30.2	334	55.7
Three children	2,866	11.4	2,509	11.3	183	8.0	174	29.0
Four or more children	1,164	4.6	1,021	4.6	50	2.2	93	15.5
B. Mean number of children enrolled	1.72		1.71		1.54		2.72	
C. By family income level								
Less than $7,500	3,639	14.5	3,486	15.7	120	5.3	33	16.0
$7,500 to 14,999	4,877	19.4	4,517	20.3	297	13.0	63	
$15,000 to 24,999	6,034	24.0	5,330	24.0	566	24.8	138	23.0
$25,000 to 34,999	4,057	18.2	3,884	17.5	544	23.8	144	24.0
$35,000 to 49,999	3,001	12.0	2,577	11.6	318	13.9	105	17.5
$50,000 to 74,999	1,309	5.2	1,079	4.9	175	7.7	55	
$75,000 or more	423	1.7	291	1.3	111	4.9	20	19.5
Income not reported	1,255	5.0	1,060	4.8	154	6.7	42	
D. Median family income	$20,700		$19,800		$26,500		$28,100	
E. By occupational category of head of household								
White collar	10,266	40.9	3,661	39.0	1,269	55.6	334	55.7
Professional/technical	(3,633)	(14.5)	(2,988)	(13.4)	(515)	(22.5)	(129)	(21.5)
Manager/administrator	(3,351)	(13.3)	(2,833)	(12.7)	(403)	(17.6)	(115)	(19.2)
Sales/clerical	(3,282)	(13.1)	(2,840)	(12.8)	(351)	(15.4)	(90)	(15.0)
Blue collar	8,833	35.2	7,996	36.0	665	29.1	175	29.2
Service/farm	2,777	11.1	2,569	11.6	161	7.0	45	
No answer or no previous work experience	3,231	12.9	2,996	13.5	189	8.3	46	15.2
F. By educational attainment of head of household								
Elementary - 0 to 8 years	2,562	10.2	2,437	11.0	89	3.9	36	16.0
High school - 1 to 3 years	3,399	13.5	3,171	14.3	167	7.3	60	
4 years	9,267	36.9	8,333	37.5	734	32.1	199	33.2
College - 1 to 3 years	4,791	19.1	4,146	18.7	524	22.9	121	20.2
4 years	2,599	10.4	2,128	9.6	382	16.7	90	15.0
5 years or more	2,491	9.9	2,007	9.0	389	17.0	94	15.7
G. By race/ethnic background of head of household								
White	18,910	75.3	16,557	74.5	1,882	82.4	471	78.5
Black	3,672	14.6	3,430	15.4	165	7.2	75	
Spanish origin	1,884	7.5	1,672	7.5	172	7.5	39	21.5
Other	644	2.6	563	2.5	66	2.9	15	
H. By marital status of head of household								
Married - spouse present	19,008	75.7	16,580	74.6	1,925	84.3	504	84.0
spouse absent	1,452	5.8	1,353	6.1	71	3.1	29	
Widowed or divorced	3,715	14.8	3,395	15.3	257	11.3	63	16.0
Never married	932	3.7	898	4.0	31	1.4	2	
I. By region of the United States								
Northeast	5,233	20.8	4,429	19.9	633	27.7	172	28.7
North Central	6,391	25.5	5,566	25.0	642	28.1	184	30.7
South	8,623	34.3	7,858	35.4	616	27.0	149	24.8
West	4,860	19.4	4,372	19.7	394	17.3	95	15.8

Figure 1 — Percent of households having children enrolled in grades 1 through 12, by number of children enrolled, and by type of school (public or private): United States, October 1982.

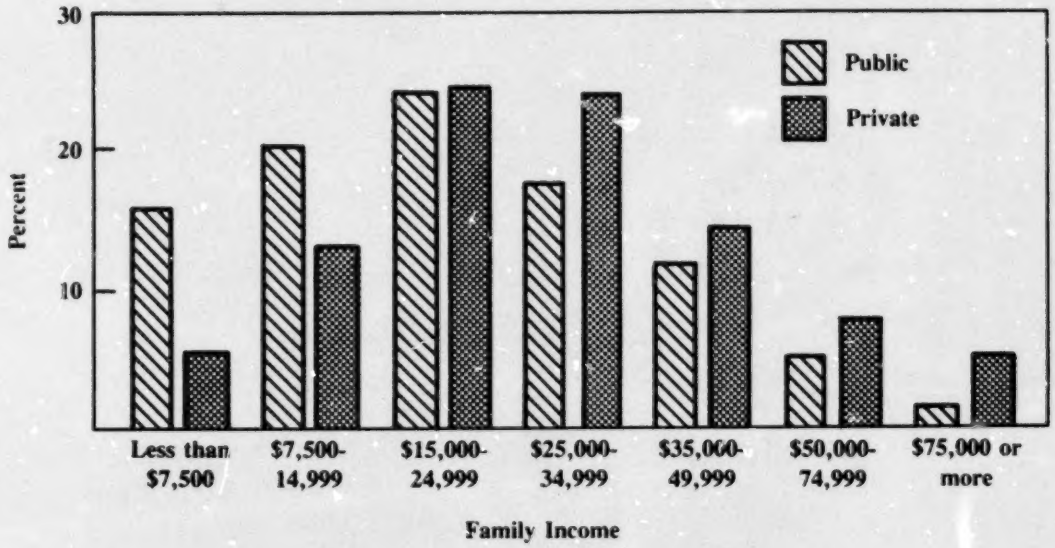


A larger proportion of households sending children to private schools than to public schools have only one child enrolled.

A smaller proportion of households sending children to private schools than to public schools have more than one child enrolled.

Mean number of children per household: public, 1.7
private, 1.5

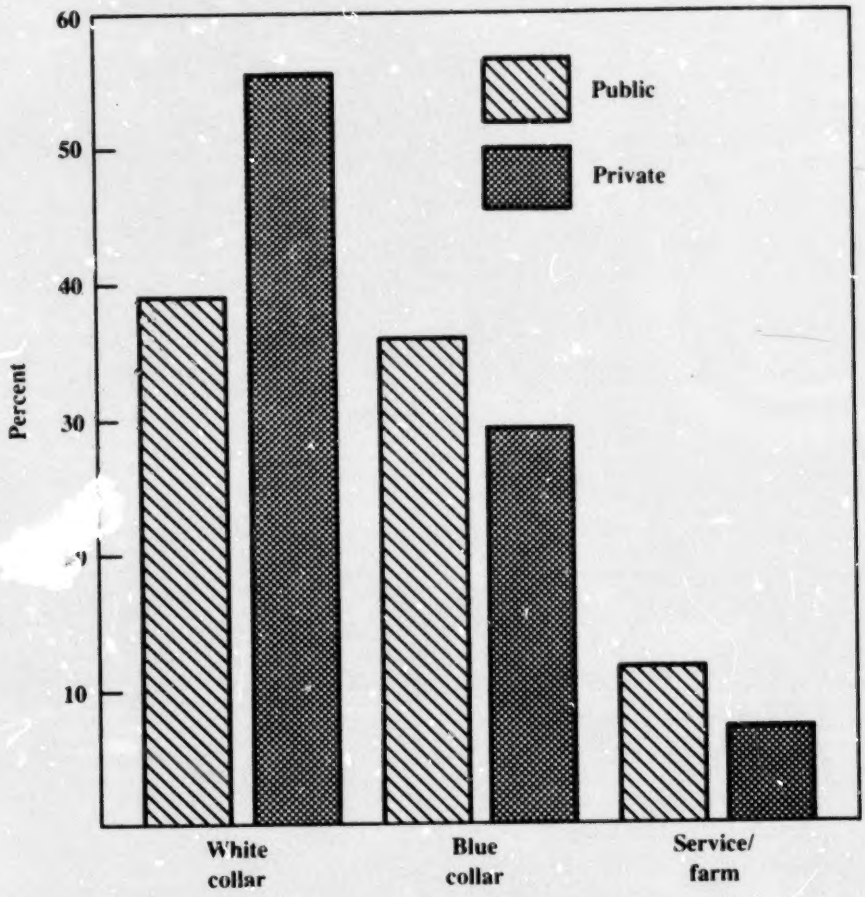
Figure 2 — Percent of households having children enrolled in grades 1 through 12, by family income, and by type of school (public or private): United States, October 1982.



A substantially lower percentage of households with children enrolled in private schools than those with children enrolled in public schools have family incomes below $15,000.

A somewhat higher percentage of households with children enrolled in private schools than those with children enrolled in public schools have family incomes higher than $25,000.

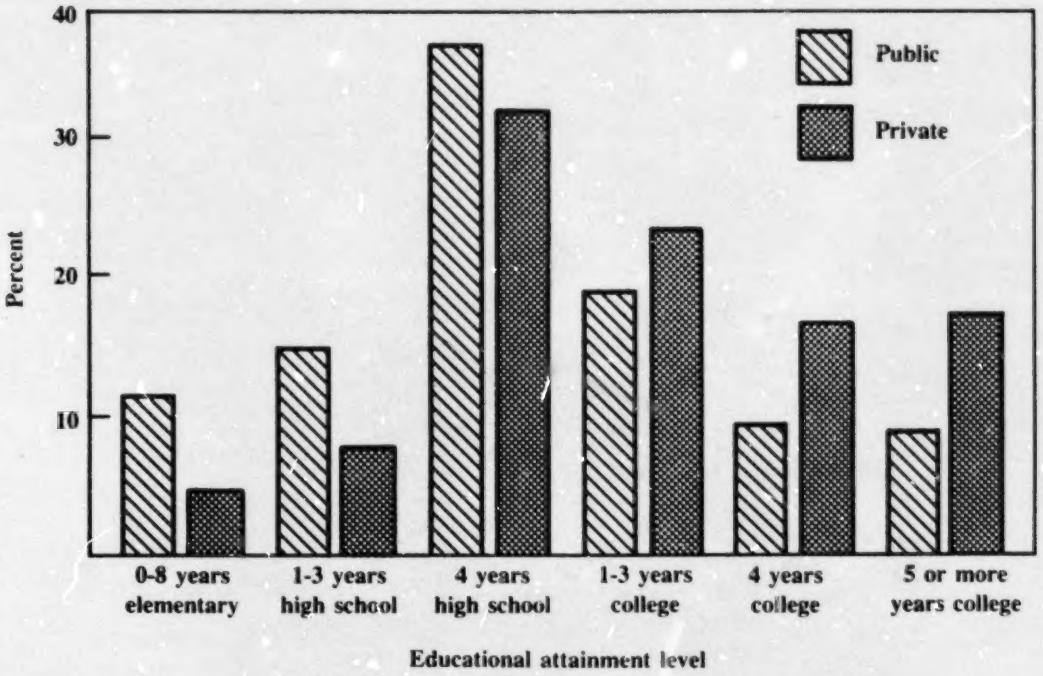
Figure 3 — Percent of households having children enrolled in grades 1 through 12 by occupational group of head of household, and by type of school (public or private): United States, October 1982.



A larger percentage of households with children enrolled in private schools than in public schools have a householder engaged in white collar occupations.

A larger percentage of households with children enrolled in public schools than in private schools have a householder engaged in blue collar or service/farm occupations.

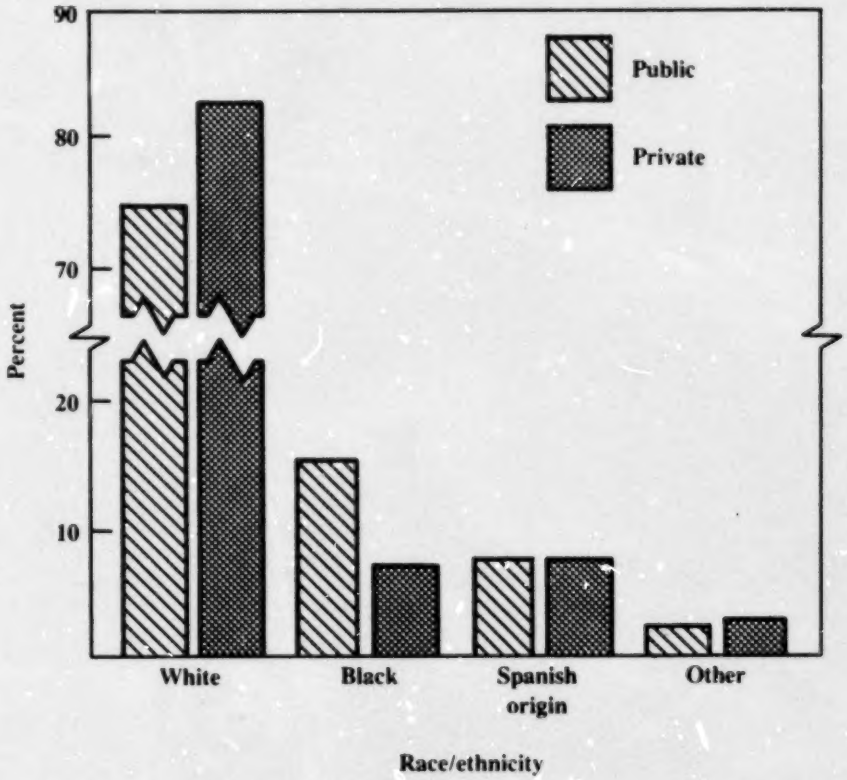
Figure 4 — Percent of households having children enrolled in grades 1 through 12 by educational attainment of head of house, and by type of school (public or private): United States, October 1982.



A lower percentage of households with children in private schools than in public schools have a householder at each educational level below one or more years of college.

At each level of educational attainment of the householder above high school the percentage of households with children in private schools is higher than that of public school households.

Figure 5 — Percent of households having children enrolled in grades 1 through 12, by race/ethnicity of head of household, and by type of school (public or private): United States, October 1982.

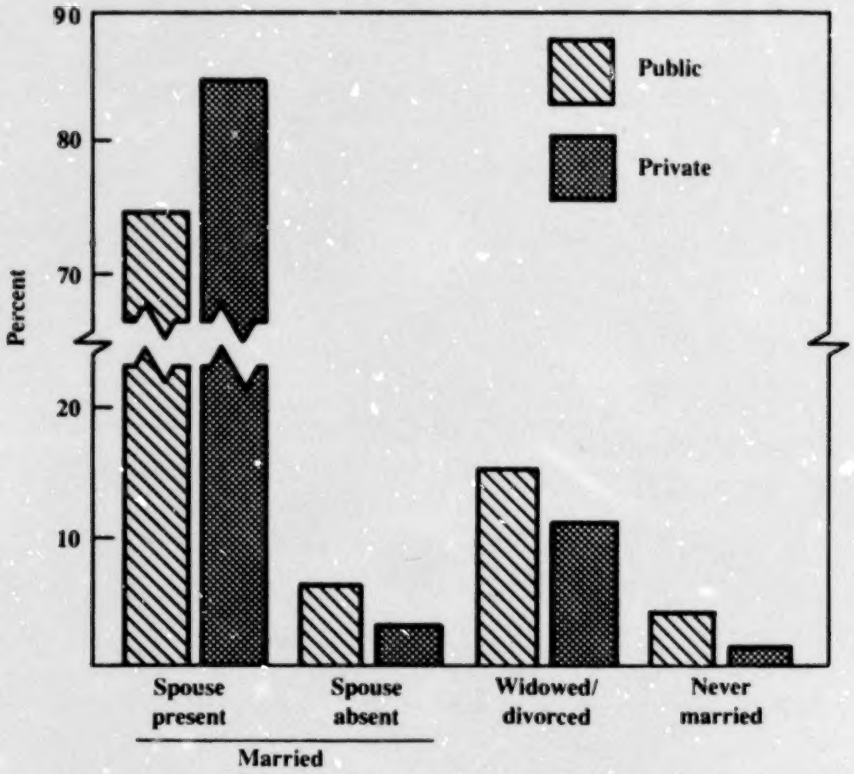


A higher percentage of households with children in private schools than in public schools have a white householder.

A higher percentage of households with a child in public school than in private school have a black householder.

An approximately equal percentage of households with children in either public or private schools are of Hispanic origin or of other races.

Figure 6 — Percent of households having children enrolled in grades 1 through 12, by marital status of head of household, and by type of school (public or private): United States, October 1982.



A higher percentage of households with children in private schools than in public schools have both spouses present.

The percentage of households in which both spouses are present is much higher for both public and private school households than the percentage in which one spouse is absent.

Definition of Terms

Household. A household consists of all the persons who occupy a housing unit, i.e., a house, an apartment or other group of rooms, or a single room when occupied as separate living quarters.

Householder. A householder is a person in whose name the housing unit is owned or rented, or, if there is not such a person, an adult member of the household.

Public School. A public school is any educational institution operated by a publicly elected or appointed board which is supported by public funds.

Private School. A private school is any educational institution which is under private control.

Family Income. Family income is the aggregate amount of money income derived from jobs, business, pensions, rents, etc., by all members of the family 15 years old and older during a 12 month period.

Occupation. The data on occupation of the householder refer to the civilian job held during the survey week. Persons employed in two or more jobs were reported in the job at which they worked the greatest number of hours during the week.

Marital Status of Householder

1. Married, spouse present includes householders living with a spouse in the household.
2. Married, spouse absent includes householders not living with a spouse either because of separation or because the spouse lives elsewhere because of job or other circumstances.
3. Widowed or divorced includes householders not living with a spouse because of divorce or death.
4. Never married includes householders with children enrolled who have never married.

Geographic Regions

The four geographic regions include the States listed below.

Northeast	North Central	South	West
Connecticut	Illinois	Alabama	Alaska
Maine	Indiana	Arkansas	Arizona
Massachusetts	Iowa	Delaware	California
New Hampshire	Kansas	District of Columbia	Colorado
New Jersey	Michigan	Florida	Hawaii
New York	Minnesota	Georgia	Idaho
Pennsylvania	Missouri	Kentucky	Montana
Rhode Island	Nebraska	Louisiana	Nevada
Vermont	North Dakota	Maryland	New Mexico
	Ohio	Mississippi	Oregon
	South Dakota	North Carolina	Utah
	Wisconsin	Oklahoma	Washington
		South Carolina	Wyoming
		Tennessee	
		Texas	
		Virginia	
		West Virginia	

Source and Reliability of Estimates

Source and Estimation Procedure

The estimates included in this report are based on data obtained in October 1982 from a sample of approximately 60,000 occupied households in 629 areas of the country comprised of 1,148 counties, independent cities, and minor civil divisions. Of the total households, interviews were not obtainable from about 2,000 occupied housing units.

The estimation procedure used in this survey involves the inflation of weighted sample results to independent estimates of the civilian noninstitutional population of the United States by age, race, and sex. The CPS weighing procedure for this survey produces weights for individuals, not households. Thus, the weight assigned to the householder is used for all tallies by household and the estimates of the numbers of households is based upon the weight assigned to the householder.

Sampling and Nonsampling Error

Since the estimates in these tabulations are based on a sample, they may differ somewhat from the figures that would have been obtained if a complete census had been taken using the same questionnaires, instructions, and enumerators. Both sampling and nonsampling errors are possible in any estimate based upon a sample survey. The standard errors provided in this appendix primarily indicate the magnitude of the sampling errors. They are also partially a measure of the effect of some nonsampling errors in response and enumeration, but do not measure any systematic biases in the data. The full extent of nonsampling error is unknown. Consequently, particular care should be exercised in the interpretation of estimates based on a relatively small number of cases or on small differences between estimates.

Sampling Variability

Standard errors can be approximated using information given in tables B-1, B-2, and B-3 that follow. The sample estimate and its estimated standard error enable the reader to construct interval estimates that include the average result of all possible samples with known probability. For example, if all possible samples were selected, with each surveyed under identical conditions, an estimate and its estimated standard error were calculated for each sample, then: (1) approximately 68 percent of the intervals from one standard error below the estimate to one standard error above the estimate would include the average result of all possible samples; and, (2) approximately 95 percent of the intervals from two standard errors below the estimate to two standard errors above the estimate would include the average result of all samples.

Special Note. Estimates are provided for households that send children to both public and private schools, although the base for some of these estimates is so small that these estimates are not very reliable. These smaller estimates, i.e., those with a base less than 75,000, are provided primarily to permit combinations of categories that might serve the user's needs.

Standard Error Tables and Their Use.

In order to derive standard errors that would be applicable to a large number of estimates and could be prepared at moderate cost, a number of approximations were required. Instead of providing a standard error for each estimate, generalized sets of standard errors are provided for various types of characteristics. The sets of standard errors provided give an indication of the order of magnitude of the standard error of an estimate rather than the precise standard error.[1]

Approximations to standard errors of estimated numbers and estimated percentages appear in tables B-1 and B-2. Estimated standard errors for specific characteristics cannot be obtained from tables B-1 and B-2 without the use of factors in table B-3. These factors must be applied to the generalized standard errors in order to adjust for the combined effect of sample design and estimating procedure on the value of the characteristic. Standard errors for intermediate values not shown in the generalized tables of standard errors may be approximated by linear interpolation.

The approximate standard error, σx, of an estimated number may be obtained by use of the formula: $\sigma x = f\sigma$, where f is the appropriate factor found in table B-3 and σ is the standard error of the estimate obtained by interpolation from table B-1.

To illustrate, it was estimated that 25,108,000 households had children enrolled in elementary and secondary schools in October 1982. Using table B-1, the standard error of an estimate of this size is 277,000. From table B-3, the f value for total households is found to be 0.63. Using the formula above, the approximate standard error is 0.63 $\times$ 277,000 = 175,000. A 68 percent confidence interval for the number of households with children enrolled ranges from 24,933,000 to 25,283,000. A 95 percent confidence interval ranges from 24,758,000 to 25,458,000.

The reliability of an estimated percentage, computed using sample data for both numerator and denominator, depends upon both the size of the percentage and the size of the total upon which the percentage is based. When the numerator and denominator of the percentage are in different categories, use the factor found in table B-3 indicated by the numerator. The approximate standard error, $\sigma(x,p)$, of an estimated percentage can be obtained by use of the formula, $\sigma(x,p) = f\sigma$. In this formula, f is the appropriate factor from table B-3 for the numerator and σ is the standard error of the estimate from table B-2.

To illustrate this computation, it was estimated that 88.5 percent of the households with children enrolled in schools had children in public schools only. From table B-2, the estimated standard error is 0.4 percent. From table B-3, the appropriate f value is 0.63. Using the formula above, the approximate standard error for 88.5 percent is 0.63 $\times$ 0.4 = 0.3 percent. The 95 percent confidence interval for this estimate is from 87.9 to 89.1 percent.

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[1] A more detailed description of the methods used to estimate standard errors for household and householder data may be found in Appendix B of the *Current Population Reports, Population Characteristics, Series P-20, No. 381, Household and Family Characteristics, March 1982* issued in May 1983 by the Bureau of the Census.

Table B-1. Standard Errors of Estimated Numbers

(numbers in thousands)

Size of estimate	Standard error	Size of estimate	Standard error
25	9	5,000	131
50	13	10,000	182
100	19	15,000	221
250	30	25,000	277
500	42	50,000	364
1,000	59	100,000	424
2,500	93		

Note: For a particular characteristic see Table B-3 for the appropriate factor to apply to the above standard errors.

Table B-2. Standard Errors of Estimated Percentages

Base of estimated percentage (thousands)	Estimated percentage					
	1 or 99	2 or 98	5 or 95	10 or 90	25 or 75	50
75	2.1	3.0	4.7	6.5	9.4	10.8
100	1.9	2.6	4.1	5.6	8.1	9.4
250	1.2	1.7	2.6	3.5	5.1	5.9
500	0.8	1.2	1.8	2.5	3.6	4.2
1,000	0.6	0.8	1.3	1.8	2.6	3.0
2,500	0.4	0.5	0.8	1.1	1.6	1.9
5,000	0.3	0.4	0.6	0.8	1.1	1.3
10,000	0.2	0.3	0.4	0.6	0.8	0.9
15,000	0.15	0.2	0.3	0.5	0.7	0.8
25,000	0.12	0.2	0.3	0.4	0.5	0.6
30,000	0.08	0.12	0.2	0.3	0.4	0.4
100,000	0.06	0.08	0.13	0.2	0.3	0.3

Note: For a particular characteristic see table B-3 for the appropriate factor to apply to the above standard errors.

Table B-3. Factors to Be Applied to Generalized Standard Errors in Tables B-1 and B-2

Characteristic	Value of f
Total or white	0.63
Black	0.60
Spanish origin	0.64
Total family income	0.72
Occupation	0.72
Educational attainment	0.63
Marital status	0.63
Region	0.63